

Protocol for Avoidance of Solar Integration (Re-Dispatch) Charge

In the 2018 Avoided Cost Case, the Company proposed to adjust the avoided energy cost payments to intermittent non-dispatchable QFs to reflect the increase in system supply costs—specifically, re-dispatch costs—caused by these generators. The Commission approved the proposed re-dispatch charge, modified pursuant to the Company’s agreement with the Public Staff to be \$0.78/MWh.¹² The Company is continuing to apply the \$0.78/MWh re-dispatch charge that was approved in the Sub 158 Order for purposes of this filing under Schedule 19-FP.

In the Sub 158 Order, the Commission also directed the Company to file a proposed protocol for avoidance of the re-dispatch charge.¹³ The Company proposes that the re-dispatch charge can be reduced to the extent the QF reduces the variability of its output through the use of an energy storage device (“ESD”). The Company defines an ESD as a component of a QF facility that uses energy storage technology, including but not limited to battery storage.

The Company will calculate the reduction in variability as the percent reduction in variability from a case without storage to a case with storage. The output for the case without storage will be the actual metered output of the facility excluding the impact of storage. The output for the case with storage will be the actual metered output for the facility including the impact of storage. Determining the impact of storage will require that the storage device is separately metered.

For each case, on a calendar year basis, the Company will calculate variability as the sum of the hourly absolute output variance from a QF-provided generation forecast.

¹² Sub 158 Order at 112.

¹³ *Id.* at 113.

The percent reduction in variability will be calculated by subtracting the ratio of the variability of the case with storage to the variability of the case without storage from one.

DENC will then calculate a credit to the re-dispatch charge as follows:

(1) the percent reduction

multiplied by

(2) the re-dispatch charge rate

multiplied by

(3) the total calendar year output (MWh) of the case with storage.

To be eligible for the re-dispatch cost reduction, a QF must provide DENC with an hourly generation output forecast for every hour of the year. For the first year of the contract, the QF must provide the forecast on or before 90 days prior to the facility's commercial operations date ("COD"). For subsequent contract years, the QF may update the forecast on or before 90 days before the start of every calendar year of the contract; if no updated forecast is provided, DENC will utilize the previously provided forecast to calculate the re-dispatch charge reduction credit. Every April, DENC will calculate the re-dispatch cost reduction using the prior calendar year forecast and metered data. DENC will provide the re-dispatch charge reduction as a line item credit with the first payment following the April calculation.

Sample Calculation:

Illustrative example of Redispatch cost reduction for one day:

Actual calculation will be for one calendar year.

Case Excluding the Impact of Storage

		QF Provided Forecast	Actual Generation Output Excluding Impact of Storage	Absolute Variance Excluding Impact of Storage
HE	1	0.00	0.00	0.00
	2	0.00	0.00	0.00
	3	0.00	0.00	0.00
	4	0.00	0.00	0.00
	5	0.00	0.00	0.00
	6	0.00	0.00	0.00
	7	0.40	0.49	0.09
	8	2.55	2.80	0.25
	9	6.75	7.25	0.50
	10	12.00	12.34	0.34
	11	15.50	15.87	0.37
	12	16.75	17.08	0.33
	13	16.50	14.35	2.15
	14	16.25	13.75	2.50
	15	15.80	13.63	2.17
	16	15.00	13.17	1.83
	17	11.50	12.02	0.52
	18	7.00	6.10	0.90
	19	3.50	2.90	0.60
	20	1.25	1.20	0.05
	21	0.10	0.09	0.01
	22	0.00	0.00	0.00
	23	0.00	0.00	0.00
	24	0.00	0.00	0.00

Sum of Absolute Variance

12.59

Ratio of Absolute Variance

75% (9.5/12.59)

Re-dispatch Cost Reduction %

25% (1 - 75%)

Case Including the Impact of Storage

		QF Provided Forecast	Actual Generation Output Including Impact of Storage	Absolute Variance Including Impact of Storage
HE	1	0.00	0.00	0.00
	2	0.00	0.00	0.00
	3	0.00	0.00	0.00
	4	0.00	0.00	0.00
	5	0.00	0.00	0.00
	6	0.00	0.00	0.00
	7	0.40	0.40	0.00
	8	2.55	2.55	0.00
	9	6.75	5.74	1.01
	10	12.00	11.04	0.96
	11	15.50	15.50	0.00
	12	16.75	17.08	0.33
	13	16.50	15.00	1.50
	14	16.25	15.00	1.25
	15	15.80	15.00	0.80
	16	15.00	13.42	1.58
	17	11.50	12.02	0.52
	18	7.00	6.10	0.90
	19	3.50	2.90	0.60
	20	1.25	1.20	0.05
	21	0.10	0.09	0.01
	22	0.00	0.00	0.00
	23	0.00	0.00	0.00
	24	0.00	0.00	0.00

Sum of Absolute Variance

9.50

Illustrative example of credit calculation:

Assumes ratio of absolute variance calculated with all hours of the year is 75% and Re-dispatch Cost Reduction is 25%.

Annual generation (MWh)	37,230
Re-dispatch Cost (\$/MWh)	0.78
Re-dispatch Cost Reduction %	x 25%
Re-dispatch Cost Credit (\$)	7,259.85